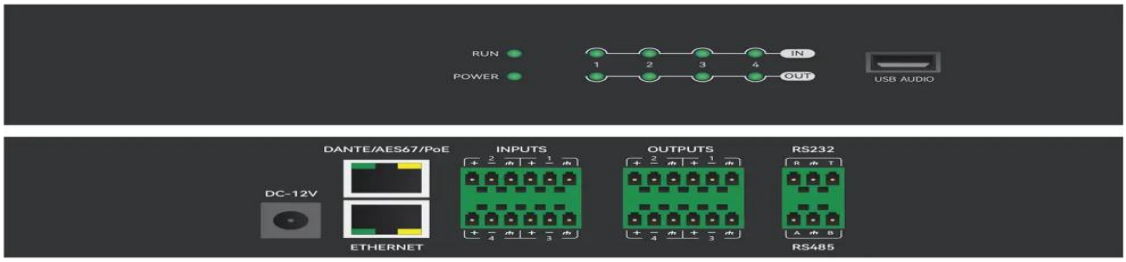
RESOUNDIFY

AurisPro-44D

Advanced Audio DSP with Dante & AEC/ANC Support 4X4, Dante 4*4



PRODUCT OVERVIEW

The **Resoundify AurisPro**-44D is a compact, high-performance Digital Signal Processor (DSP) designed to meet the demands of modern audio installations. Built with 4 analog inputs and 4 analog outputs, along with 4×4 Dante digital audio channels, it provides exceptional flexibility for small to mid-sized AV systems.

Whether used in conference rooms, boardrooms, classrooms, or multi-room AV zones, the AurisPro-44D delivers powerful audio processing capabilities. It supports AEC (Acoustic Echo Cancellation) to eliminate echo during calls, and ANC (Active Noise Cancellation) to suppress background noise, ensuring crystal-clear communication . Fully compatible with Dante audio networking, the AurisPro-44D allows easy integration into existing networked AV environments, enabling efficient routing of audio signals with ultra-low latency and no degradation in quality.

KEY FEATURES

- **Professional SHARC DSP Core:** Built on the ADI SHARC platform, the AurisPro-44D delivers ultra-fast processing with a semi-open architecture for user-defined signal chains.
- **High-Quality Audio Processing:** Supports 24-bit / 48kHz audio resolution across all channels, ensuring clear, natural sound reproduction.
- **Intelligent Feedback Suppression:** Each input channel features adaptive feedback elimination, automatically removing audio feedback in live environments.
- **Full-Duplex AEC & ANC:** Integrated Acoustic Echo Cancellation (AEC) and Active Noise Cancellation (ANC) guarantee clean voice capture for conferencing applications.
- **Auto Mixer & Gain Control:** Includes Auto Mixer, Automatic Gain Control (AGC), and Ducking to manage varying audio levels and prioritize inputs automatically.
- **Ambient Noise Compensation:** Real-time ANC (Ambient Noise Compensator) adjusts output based on room noise, maintaining consistent speech clarity.
- **Comprehensive Audio Matrix:** Internal mixing matrix with channel linking, grouping, duplication, and precise level control for customized signal routing.
- **Expandable Control Options:** 8 configurable GPIOs (input/output/ADC), RS-232 & UDP support with assignable ports for third-party systems.
- **Multi-Platform Compatibility:** Supports both iOS and Windows OS with dual USB audio interface for recording and conferencing.

APPLICATIONS

- Boardrooms
- Classrooms
- Auditorium

RESOUNDIFY

TECHNICAL SPECIFICATIONS

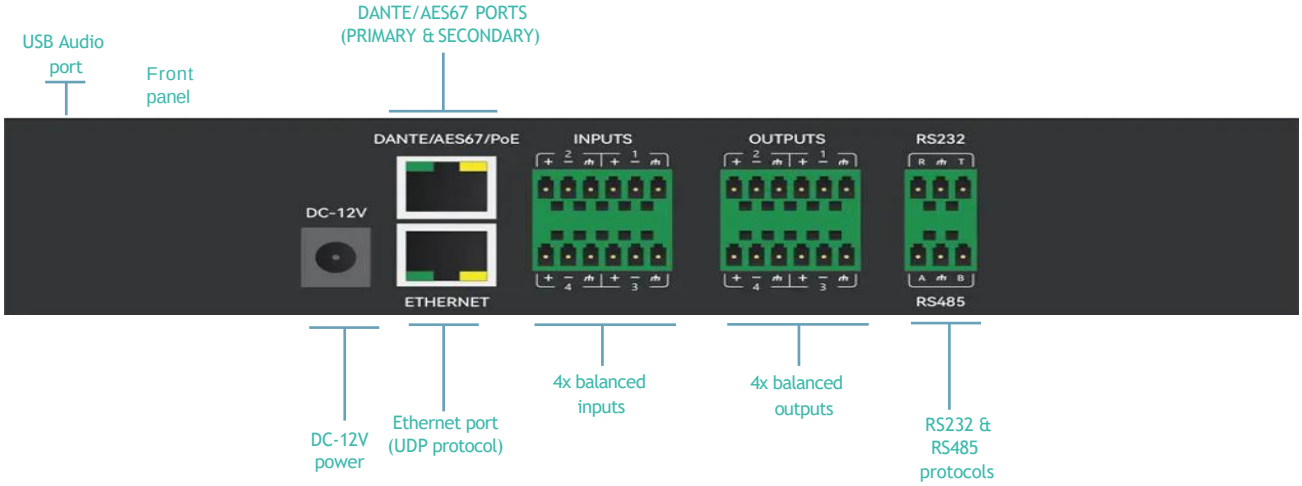
System Specifications

Processor	ADI SHARC 21489@450 MHz SIMD
Raw Processing Capacity	400 MIPS, 1.6 GFLOPS
Sampling Rate	48 kHz ± 100 ppm
Frequency Response (A/D/A)	20 Hz – 20 kHz ± 0.3 dB
Dynamic Range (A/D/A)	110 dB (A-weighted)
THD + Noise	< -95 dB (22.4 kHz BW, unweighted); 1 kHz @17 dBu, 0 dB gain
Channel Separation (A/D/A)	110 dB @ 1 kHz, +24 dBu
Latency (A/D/A)	<3 ms (input routed directly to output)
Delay Memory	174 mono seconds
Analog Control Inputs	0-3.3 VDC
Recommended External Control Potentiometer	10k Ohm, linear taper
Logic Outputs	Low (0 V) when active Pulled high (5 V) when inactive
Logic Output Maximum External Power Supply / Current Sinking	AC110~240V, 50Hz/60Hz
Logic Output Maximum Output Current	10 mA
RS-232 Accessory Serial I/O	57.6 kbps (default), 8 data bits, 1 stop bit, no parity, Straight-through wiring; pins 2, 3, 5 used
AEC Channel	2-bus AEC
Maximum Stored Presets	16 storable presets

Analog Inputs and Outputs

Number of Analog Inputs	4 switchable balanced mic or line level
Analog Input and output Connectors	3.81 mm terminal blocks
Nominal Analog Input and output Level	+4 dBu with 20 dB headroom
Analog Input and output Maximum Level	+24 dBu (or +22.8 dBu into a 2k Ohm minimum load)
Analog Mic Pre-amp Gain	0 to 51 dB (in 3 dB steps) with ±24 dB digital trim
Analog Mic Pre-amp EIN	< -125 dB (with 150 Ohm source, 22.4 kHz BW)
Analog Input Impedance	2k Ohms balanced, 1k Ohms unbalanced
Analog Phantom Power (per input)	+48 VDC per input, max 10 mA
Analog Input Dynamic Range	<113 dB, A-weighted
Analog Input THD + Noise	<-100 dB (22.4 kHz BW, unweighted), 1 kHz @ +15 dBu, 0 dB gain
Analog Input Latency	1 ms
Number of Analog Outputs	4 balanced line level
Analog Output Impedance	300 Ohms balanced, 150 Ohms unbalanced
Analog Output Dynamic Range	113 dB, A-weighted
Analog Output THD + Noise	< -97 dB (22.4 kHz BW, unweighted); 1 kHz, 0 dB gain, +8 dBu output
Analog Output Latency	1.5 ms

Rear View



Control Software

AuriControl+ is our dedicated configuration software, available for free download from our official website. Designed with a user-friendly interface, it allows fine-tunusers to easily tailor the matrix settings to match the specific needs of any installation. With this software, you can e a wide range of parameters, including:

- Input gain
- Expander
- Compressor & Limiter
- Auto Gain Control (AGC)
- Equalizer
- Figure Balancer
- Active Noise Control (ANC)
- Feedback (AFC)
- Noise gate
- Ducker
- SPL
- Share AM (Automixer)
- Echo Canceller (AEC)
- Camera Tracking
- Noise Suppresion (ANS)
- Matrix
- Low & High Pass filters
- Delayer
- Output